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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,467	11/28/2001	Matthew P.J. Baker	GB 000168	2280
24737	7590	11/15/2005	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			PHAM, TUAN	
			ART UNIT	PAPER NUMBER
			2643	
DATE MAILED: 11/15/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/995,467

Applicant(s)

BAKER ET AL.

Examiner

TUAN A. PHAM

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. **Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alan Sicher (WO 93/17531) in view of Freeburg (U.S. Patent No.: 5,095,535) and further in view of Nelken (U.S. Patent No.: 6,961,720).**

Regarding claims 1, 3, and 13, Alan Sicher teaches a radio communication system and transmitter and method having a communication channel comprising a transmitter having a plurality of antennas and a receiver having at least one antenna (see figure 3, plurality antenna 126').

mapping means responsive to the data channel characterization means and the data categorization means for determining a mapping to apply the set of data to the transmitter's plurality of antennas such that the set of data is transmitted over a channels in which the determined data quality of the set of data corresponds to the at least one transmission property of the channels, thereby determining over which channels the set of data will be transmitted (see figure 4b, high priority, medium priority, low priority, page 14, ln.6-23).

It should be noticed that Alan Sicher fails to teach path characterization means for determining at least one transmission property of each path of the plurality of paths. However, Freeburg teaches such features (see col.7, ln.13-43, col.9, ln.1-7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Freeburg into view of Alan Sicher in order to provide call priority as suggested by Alan Sicher at page 2, lines 29-35.

Alan Sicker and Freeburg, in combination, fails to teach data categorization means for determining and assigning a data quality category to a set of data for transmission, said data categorization means being adapted to assign different categories to different segments of the set data from an application. However, Nelken teaches such features (see col.4, ln.43-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Nelken into view of Alan

Sicher and freeburg in order to transmit the priority data as suggested by Nelken at column 4, lines 43-55.

Regarding claim 2, Alan Sicher further teaches the receiver comprises means for performing channel estimation and means for signaling details of the output of the channel estimation to the path characterization means (see figure 2, control channel generator 102, page 5, ln.14-35).

Regarding claim 4, Alan Sicher further teaches a transmitter comprises the data for transmission may be provided from a plurality of sources and in that the categorization means is adapted to assign a category depending on the source of the data (see figure 4b, high priority, medium priority, low priority, page 14, ln.6-23).

Regarding claim 5, Alan Sicker further teaches a transmitter comprises the categorization means is adapted to assign different categories to respective segments of data from an application depending on at least one of their relative importance, required quality of service (see page 2, ln.1).

Regarding claim 6, Freeburg further teaches a transmitter comprises the path characterization means is adapted to determine at least one of a delay, a signal-to-noise ratio, and a required transmission power for a given signal-to-noise ratio or error rate for each path (see col.6, ln.60-65).

Regarding claim 7, Nelken further teaches a transmitter comprises parameter selection means are provided for setting at least one transmission parameter relating to the data depending on at least one of the channel assigned for transmission of the data

Art Unit: 2643

and the category assigned to the data (see col.4, ln.43-55, high priority, medium priority, low priority, page 14, ln.6-23).

Regarding claim 8, Nelken further teaches a transmitter comprises a transmission parameter specifies the type of error control coding added to the data (see col.4, ln.43-55).

Regarding claim 9, Alan Sicher further teaches a transmitter comprises a transmission parameter specifies the modulation scheme to be used for transmission of the data (see page 8, ln.25-34).

Regarding claim 10, Alan Sicker further teaches a transmitter comprises signal-to-noise ratio to be achieved for at least one signal path (see page 14, ln.25-30).

Regarding claim 11, Freeburg further teaches a transmitter comprises a plurality of spatially separated sites, each site comprising at least one antenna (see figure 1a, plurality antenna sectors A-F, col.3, ln.1-20).

Regarding claim 12, Freeburg further teaches a transmitter comprises means are adapted to determine properties of the paths at least partly from measurements made by the receiver and signaled to the transmitter (see col.7, ln.13-42).

Regarding claim 14, Alan Sicher further teaches a transmitter comprises transmitting data requiring a higher quality of service over a better sub-channel than data requiring a lower quality of service (see page 14, ln.6-24).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan A. Pham** whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz can be reached on (571) 272-7499 and

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have question on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 2643
November 8, 2005
Examiner

Tuan Pham


CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600